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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/983,041	10/22/2001	Atsushi Shibuya	PF-2894/NEC/US/mh	8200
30743 7590 12/11/2007 WHITHAM, CURTIS & CHRISTOFFERSON & COOK, P.C. 11491 SUNSET HILLS ROAD SUITE 340 RESTON, VA 20190			EXAMINER SURVILLO, OLEG	
			ART UNIT 2142	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/983,041

Applicant(s)

SHIBUYA, ATSUSHI

Examiner

Oleg Survillo

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29,31-38,40-47 and 49-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29,31-38,40-47 and 49-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 October 2007 and 22 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 25, 2007 has been entered.

Response to Amendment

2. This Office action is responsive to the amendment filed on October 25, 2007. Claims 1-29, 31-38, 40-47 and 49-55 remain pending in the application. Claims 1, 14, 16, 29, 38, and 47 are amended herein. Claims 30, 39 and 48 are canceled. No new claims have been added.

Response to Arguments

3. With regard to the Applicant's remarks filed on October 25, 2007:

Regarding objection to drawings, applicant's amendment and arguments have been fully considered and are persuasive. Therefore, the objection has been withdrawn.

Regarding claim objections, applicant's arguments have been fully considered but they are not fully persuasive. In particular, applicant argued that "*claims 1 and 16*

contain different language corresponding to the different conditions described in the specification and figures. There is a distinction between a table that contains an identifier for an image or sound file and a table that contains the image or sound file itself." This distinction may be true, however, claims 1 and 16 are broad enough to encompass both embodiments such that identifier for an image or sound file to be displayed and identified image or sound file are not mutually exclusive. A table containing an identifier for an image file may well contain the identified image file itself, wherein a table containing identified image file inherently contains identifier for the image file since image file has to have some kind of identifier. Therefore, argued distinction between the above-mentioned limitations of claims 1 and 16 is not readily recognized. The objection is, nevertheless, withdrawn in view of applicant's arguments and examiner's reply, as discussed above.

Regarding the rejection of claims 29, 31-37, 47, and 49-55 under 35 U.S.C. 101 as being directed to a non-statutory subject matter, applicant's amendments to claim 29 and claim 47 and arguments have been fully considered but they are not sufficient to overcome the rejection. Therefore, the rejection is maintained.

In particular, replacing "function block" language with "means plus function" language does not add any tangible elements to a terminal device of claim 29.

35 U.S.C. 101 defines four categories of inventions deemed to be the appropriate subject matter of a patent: processes, machines, articles of manufacture, and

compositions of matter. The latter three categories define “things” or “products” while the first category defines “actions”. See *MPEP 2106*.

In this particular case, a terminal device does not fall within one of statutory categories because the claim does not include any tangible elements that would define “things” or “products”. As amended, claim 29 incorporates means-plus-function limitations reciting a function to be performed rather than definite structure or materials for performing that function. In particular, limitations: “means for detecting” and “means for displaying” are interpreted to invoke 35 USC 112, sixth paragraph.

The current specification shows that detecting in an information item a retrieval condition and displaying said information item are performed by a computer program (see detailed description of Fig. 6, page 26; also see claim 27 wherein means for performing retrieval [means for detecting] and means for displaying both are stored in memory and therefore are a software per se). Therefore, means for detecting and means for displaying are interpreted to be a computer program, which is software per se.

Applicant is advised to either:

- amend claim 29 to explicitly recite at least one tangible element that would make the terminal device define at least one of “things” or “products”; or
- argue why 35 U.S.C. 101 rejection is improper by showing that means for detecting or means for displaying, or both, represent tangible elements in such a way that is consistent with the interpretation of means-plus-language used in claims 14, 27, and 28.

As to claim 47, replacing "means plus language" with "computer code" language does not add any tangible elements to a computer implemented program of claim 47.

Claim 47 is directed to a computer program, reciting a computer code for performing a specified function. A computer program, per se, is interpreted to be a software only and, therefore, does not fall in one of four statutory categories defined by 35 U.S.C. 101.

Amending the claim to include a computer readable medium embodying the software would provide tangible structure and obviate the rejection.

It is being noted that specification shows that the read only memory (60) stores one or more programs to be implemented for operation of the central processing unit (10) (See detailed description of Fig. 1). Therefore, amending claim 47 to include such a computer readable medium would not introduce new matter into the claim.

Regarding claims 1-29, 31-38, 40-47, and 49-55 being rejected under 35 U.S.C. 102(e) as being anticipated by Maeda et al. and, alternatively, as being anticipated by Cruickshank, applicant's arguments have been considered, but are moot in view of the new grounds of rejection.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "DISPLAYING INFORMATION ITEMS BASED ON PREDETERMINED KEY OBJECTS".

Applicant is advised to either:

- amend the title of the invention as suggested by the examiner; or
- provide an alternative title that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 29, 31-37, 47, and 49-55 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As to claim 29, a terminal device does not fall within one of statutory categories because the claim does not include any tangible elements that would define "things" or "products", as discussed above.

As to claim 47, a computer program, reciting a computer code for performing a specified function, is interpreted to be a software only without a computer readable medium embodying the computer program, and, therefore, does not fall in one of four statutory categories defined by 35 U.S.C. 101.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 10-22, 25-29, 31-35, 38, 40-44, 47, and 49-53 are rejected under 35 U.S.C. 102(b) as being anticipated by Deluca et al. (Patent No.: 5,784,001).

As to claim 1, Deluca shows a communication system (Figs. 1 and 11, col. 5 line 16) including:

a communication network [having a data communication receiver and transmitting terminal forming a network for communicating electronic message as a radio signal between devices] (col. 1 lines 15-18, col. 5 lines 15-20); and

a plurality of terminal devices [data communication receiver (100), transmitting terminal (305)] (col. 1 lines 9-11, Fig. 1, Fig. 11) connectable to said communication network for transmitting from a sender [transmitting terminal] and receiving by a user [receiver] an information item [electronic message] (col. 2 lines 42-50) through said communication network;

wherein said communication system includes a table [graphics database (155)] (Figs. 2 and 14) which provides at least one retrieval condition [key words or codes] (Figs. 2 and 14) and for each said retrieval condition at least one corresponding identifier for an image file to be displayed [name of the image to be displayed] (Figs. 2

and 14), so as to enable said terminal devices of said user to detect in said information item from said sender said at least one retrieval condition [having a presentation element (150) that recognizes predetermined codes or predetermined key words in the message] (col. 2 lines 42-50, col. 6 lines 22-25) and if the retrieval condition is detected in said information item by said user's terminal device [if predetermined codes or key words are recognized in the received message by the data communication receiver] (col. 2 lines 42-50, col. 6 lines 22-25) to display said information item with said at least one corresponding identified image file [display the message with the image that is associated with recognized key words or codes] (Figs. 3-8, 15, 16, 18-23), the corresponding image file being distinct from said information item [the image file representing key words or codes of the received message] (col. 3 lines 33-37, col. 6 lines 22-36).

As to claims 2, 17, 31, 40, and 49, Deluca shows that each retrieval condition in said table comprises a key object (Figs. 2 and 14, col. 3 line 18-28, col. 6 lines 22-36).

As to claims 3, 18, 41, and 50, Deluca shows that each said key object comprises at least one object selected from the group of key words and key marks [key words and codes] (Figs. 2 and 14, col. 3 line 18-28, col. 6 lines 22-36).

As to claims 4, 19, 32, 42, and 51, Deluca shows that said table includes designating data which designate necessary data for displaying said information item with said at least one corresponding identified image file [graphics database shows correspondence data, which provides correlation between predetermined key words or key marks and associated image to be displayed] (Figs. 2 and 14, col. 3 lines 18-28, col. 6 lines 22-36).

As to claims 5, 20, 33, 44, and 53, Deluca shows that said table includes necessary data for displaying said information item with said at least one corresponding identified image file [graphics database shows correspondence data, which provides correlation between predetermined key words or key marks and associated image to be displayed] (Figs. 2 and 14, col. 3 lines 18-28, col. 6 lines 22-36).

As to claims 6, 21, and 34, Deluca shows that said table is editable [being able to add additional codes and corresponding image data to the graphics database] (col. 3 lines 6-13, Fig. 13).

As to claim 7, Deluca shows that said table is transferable through said communication network [downloading graphics database over-the-air] (col. 3 lines 9-12, col. 6 lines 1-18, Fig. 13).

As to claim 10, Deluca shows that said table is stored in a memory of said terminal device (col. 3 lines 1-3, Fig. 1).

As to claim 11, Deluca shows that said table is open on a server computer on said communication network, so as to enable said terminal device to download said table from said server [programming the data communication receiver over-the-air with new or enhanced images and corresponding codes by transmitting a programming message from a terminal (305)] (Fig. 12, Fig. 13, col. 5 lines 48-67 and col. 6 lines 1-18).

As to claims 12 and 25, Deluca shows that each of said terminal devices includes:

a first functional block for performing said retrieval under said retrieval condition with reference to said table [presentation element (150)] (col. 2 lines 42-50, col. 4 lines 33-51, Fig. 10); and

a second functional block for displaying said information item with said at least one corresponding identified image file [presentation element (150)] (col. 2 lines 42-50, col. 4 lines 33-51, Fig. 10 wherein the presentation element drives display (130) with image data and/or message characters included in message, step (235)).

As to claims 13 and 26, Deluca shows that each of said terminal devices further includes:

a third functional block for transmitting and receiving said table through said communication network [receiver (110), Fig. 1, col. 2 line 20).

As to claim 14, Deluca shows that each of said terminal devices includes:

a processing unit [processor (120), Fig. 1, col. 2 lines 24-26); and

a memory accessible by said processing unit [ROM (135), Fig. 1, col. 28-32), and said memory storing a computer program [presentation element (150)] comprising:

means for performing said retrieval under said at least one retrieval condition with reference to said table (col. 2 lines 42-50, col. 4 lines 33-51, Fig. 10); and

means for displaying said information item with said at least one corresponding identified image file, the corresponding image file being distinct from said information item (col. 2 lines 42-50, col. 4 lines 33-51, Fig. 10 wherein the presentation element drives display (130) with image data and/or message characters included in message, step (235)).

As to claims 15 and 28, Deluca shows that said computer program further comprises means for transmitting and receiving said table through said communication network (Fig. 13, col. 6 lines 1-18).

As to claim 16, Deluca shows a terminal device [data communication receiver (100)] connectable to a communication network [having a data communication receiver and transmitting terminal forming a network for communicating electronic message as a radio signal between devices] (col. 1 lines 15-18, col. 5 lines 15-20), said terminal device comprising:

a processing unit [processor (120), Fig. 1, col. 2 lines 24-26];

a communication unit electrically coupled to said processing unit for transmitting and receiving an information item [receiver (110), Fig. 1, col. 2 line 20];

a display unit electrically coupled to said processing unit for displaying said information item [display (130)] (Fig. 1, col. 2 lines 35-39);

an operation unit electrically coupled to said processing unit for operating said terminal device [controls (140)] (Fig. 1, col. 2 lines 35-37); and

a memory unit electrically coupled to said processing unit [ROM (135), Fig. 1, col. 28-32) for storing a table [graphics database] (col. 4 lines 43-45) which provides at least one retrieval condition [key words or codes] (Figs. 2 and 14) and for each said retrieval condition at least one corresponding identified image file [image to be displayed] (Figs. 2 and 14), so as to enable said terminal device of a user to detect in an information item transmitted from said terminal device of a sender said at least one retrieval condition [having a presentation element (150) that recognizes predetermined codes or predetermined key words in the message] (col. 2 lines 42-50, col. 6 lines 22-25) and if the retrieval condition is detected [if predetermined codes or key words are recognized

in the received message by the data communication receiver] (col. 2 lines 42-50, col. 6 lines 22-25) to display said information item with said at least one corresponding identified image file [display the message with the image that is associated with recognized key words or codes] (Figs. 3-8, 15, 16, 18-23), the corresponding image file being distinct from said information item [the image file representing key words or codes of the received message] (col. 3 lines 33-37, col. 6 lines 22-36).

As to claims 22 and 35, Deluca shows that said table is transferable from said communication unit through said communication network [downloading graphics database over-the-air] (col. 3 lines 9-12, col. 6 lines 1-18, Fig. 13).

As to claim 27, Deluca shows that said memory stores a computer program comprising:

means for performing said retrieval under said at least one retrieval condition with reference to said table (col. 2 lines 42-50, col. 4 lines 33-51, Fig. 10); and

means for displaying said information item with said at least one corresponding identified image file (col. 2 lines 42-50, col. 4 lines 33-51, Fig. 10 wherein the presentation element drives display (130) with image data and/or message characters included in message, step (235)).

As to claim 29, Deluca shows a terminal device [data communication receiver (100)] connectable to a communication network [having a data communication receiver and transmitting terminal forming a network for communicating electronic message as a radio signal between devices] (col. 1 lines 15-18, col. 5 lines 15-20), said terminal device comprising:

means for detecting [presentation element (150)] (col. 2 lines 42-50, col. 4 lines 33-51, Fig. 10) in an information item [electronic message] a retrieval condition [key words or codes] (Figs. 2 and 14), said information item and said retrieval condition having been transmitted over said communication network by a said terminal device of a sender to a said terminal device of a user (col. 2 lines 42-50); and

means for displaying said information item with at least one image file identified as corresponding to each said detected retrieval condition, the image file being distinct from said information item [presentation element (150)] (col. 2 lines 42-50, col. 4 lines 33-51, Fig. 10 wherein the presentation element drives display (130) with image data and/or message characters included in message, step (235)),

wherein said retrieval condition and each said identified image file corresponding to said retrieval condition is recorded in a table (Figs. 2 and 14).

As to claim 38, Deluca shows:

detecting in an information item a retrieval condition [predetermined codes or key words are recognized in the received message by the data communication receiver]

(col. 2 lines 42-50, col. 6 lines 22-25), said retrieval condition having been inserted in said information item by a sender and said information item having been transmitted over a communication network by said sender to a user (col. 2 lines 42-60); and

displaying said information item with at least one image file identified as corresponding to said detected retrieval condition [display the message with the image that is associated with recognized key words or codes] (Figs. 3-8, 15, 16, 18-23), the image file being distinct from said information item [the image file representing key words or codes of the received message] (col. 3 lines 33-37, col. 6 lines 22-36),

wherein said retrieval condition and each said identified image file corresponding to said retrieval condition is recorded in a table [graphics database (155)] (Figs. 2 and 14) and said detecting is performed with reference to each of one or more retrieval conditions in said table (col. 3 lines 38-50), said displaying being performed for each detected retrieval condition (Figs. 3-8), said sender and said user each being capable of executing said method (col. 1 lines 9-11).

As to claims 43 and 52, Deluca shows reading out said necessary data in accordance with said designating data before displaying said information item [recognizing a code associated with a graphic message for determining, with reference to the code format, whether any characters included in the message are arranged in the predetermined code format] (col. 4 lines 40-50, col. 6 lines 40-44).

As to claim 47, Deluca shows a computer program [presentation element (150)] capable of performing the method steps, as discussed per claim 38.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8, 9, 23, 24, 36, 37, 45, 46, 54, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deluca et al. in view of Abu-Hakima et al. (US 6,820,237 B1).

As to claims 8, 23, 36, 45, and 54, Deluca shows all the elements except said information item comprising an e-mail.

Abu-Hakima teaches an apparatus and method for intelligently analyzing key words/phrases of an electronic document by recognizing and utilizing the context of the electronic document such as e-mail (col. 1 lines 5-15, col. 3 lines 10-50).

Abu-Hakima shows that said information item [electronic document] comprises an e-mail (col. 1 lines 5-15).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system/device/method/program of Deluca by having the information item comprise an e-mail in order perform retrieval of key words/key marks

from an electronic message being an e-mail, as taught by Abu-Hakima, and presenting graphic messages in a data communication receiver, as taught by Deluca.

As to claims 9, 24, 37, 46, and 55, Deluca in view of Abu-Hakima shows that said e-mail has at least an attached file (col. 5 lines 10-12 in Abu-Hakima).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oleg Survillo whose telephone number is 571-272-9691. The examiner can normally be reached on M-Th 7:30am - 5:00pm; F 7:30am - 4:00pm EST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Examiner: Oleg Survillo
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SUPERVISORY PATENT EXAMINER